

REMARKS

Applicants invention is directed to compositions consisting essentially of spiroxamine, prothioconazole, and tebuconazole, meaning that no other active ingredients that would affect the essential character of their invention are present.

Applicants gratefully acknowledge the withdrawal of the previous rejections and further acknowledge the entry of new grounds of rejection.

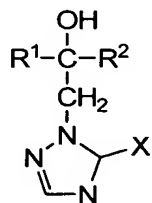
Rejections under 35 U.S.C. 103

A. Jautelat et al in view of Latteur et al

Claims 9 and 11-15 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,789,430 ("Jautelat et al") in view of a cited Latteur et al article from *BioControl*, 47, 435-444 (2002). Applicants respectfully traverse.

Applicants note that the previously cited U.S. Patent 6,884,798 ("Baron et al") is not part of the current rejection but that the current Final Office Action at page 5 includes a paragraph referring to Baron et al. In a phone call on September 30, 2008, the Examiner kindly confirmed that this paragraph was inadvertently carried forward from the previous Office Action dated March 25, 2005, and can be ignored.

As fully discussed in Applicants' previous Amendment dated June 9, 2008, Jautelat et al discloses microbicidal triazolyl derivatives of the formula



one compound of which is prothioconazole. See, e.g., formula in Example 1 at column 35. Jautelat et al teaches that the disclosed compounds can be used in mixtures with other active compounds, including the fungicide tebuconazole (see column 33, line 21). However, despite providing exhaustive lists of possible mixing partners, Jautelat et al does not mention spiroxamine. Moreover, Jautelat et al does not specifically disclose mixtures of prothioconazole with any particular active ingredient mixing partner, much less teach or suggest the very narrowly defined three-component ^{Mixture} claimed by Applicants. Jautelat et al alone would thus not lead those skilled in the art to Applicants' claimed invention.

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Applicants also submit that the Latteur et al article would not lead those skilled in the art from Jautelat et al to their claimed invention. Latteur et al discloses efficacy

data for twenty fungicides, among which are spiroxamine and tebuconazole. E.g., Table 2 at page 441. However, Latteur et al at page 442 specifically states that “[a]ll fungicide formulations tested in this study contained a single active ingredient” (emphasis added) and that “[t]here are several questions about the possible effects of mixtures of two or three active ingredients at the same time,” leaving open for further study using “improved tests” the answer to such questions. This is hardly the kind of teaching that would lead to efficacious combinations of active compounds, much less to the specific three-component combination claimed by Applicants. For this reason alone, Applicants submit that their claimed invention is not rendered obvious by Jautelat et al in view of the Latteur et al article.

Nevertheless, despite believing that experimental data should not be necessary, Applicants again refer to the supporting data presented in their specification. Applicants’ experimental results, although completely ignored in the Final Office Action, are consistent with the patentability of their claimed invention.

As clearly shown in Table 3 (specification at page 10), Applicants found that a three-component composition according to their invention exhibited 100% fungicidal efficacy against *Fusarium nivale*, whereas one would have expected a significantly lower efficacy of only 54% as calculated using the three-component Colby formula. This showing of synergism is clearly sufficient to overcome any inference of obviousness. Moreover, the data shown in Tables 1 and 2, although only indirectly relevant, are also consistent with the direct showing evidenced by Table 3. That is, (as discussed in detail in Applicants’ previous Amendment), “Colby-like” calculations based on the data in Tables 1 and 2 give approximate calculated values that are so different from the observed values that they are at least suggestive of synergism.

Applicants therefore respectfully submit that their claimed invention is not rendered obvious by Jautelat et al in view of the Latteur et al article.

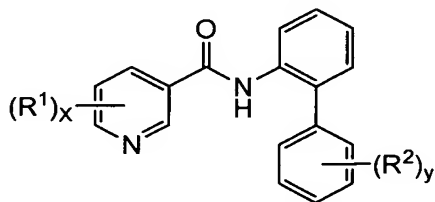
B. Jautelat et al in view of Latteur et al, Eicken et al, and Valcke et al

Claim 10 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Jautelat et al in view of the cited Latteur et al article and further in view of U.S. Patents 6,503,932 (“Eicken et al”) and 5,397,795 (“Valcke et al”). Applicants respectfully traverse.

As discussed above, Applicants maintain that Jautelat et al and the Latteur et al article would not suggest their claimed invention. Applicants further submit that

Eicken et al and Valcke et al do not bridge the gap between the primary references and their claimed invention.

Eicken et al discloses fungicidal mixtures of **(A)** amide compounds of the formula



in which R¹ and R² are independently halogen, nitro, cyano, (halo)alkyl, (halo)-alkenyl, (halo)alkynyl, (halo)alkoxy, haloalkylthio, alkylsulfinyl, or alkylsulfonyl; x is 1, 2, 3, or 4; and y is 1, 2, 3, 4, or 5; and **(B)** an amino compound described as being “spiroxamin” but, if so, represented by a defective formula lacking a –CH₂– group between the spirocyclic core and the amino side chain. E.g., column 1, lines 4-40. Even if the second compound is assumed to be spiroxamine, the other component shares nothing in common with prothioconazole and tebuconazole as required to complete the three-component mixtures claimed by Applicants.

Valcke et al also discloses binary fungicidal mixtures but this time containing propiconazole and tebuconazole. E.g., column 1, lines 28-32. Just as with Eicken et al, Valcke et al discloses mixtures containing only one of the compounds specified by Applicants.

Applicants submit that the Final Office Action provides no objective basis for using the absolute or relative amounts of the compounds used in the binary mixtures taught by Eicken et al and by Valcke et al to determine the relative amounts of spiroxamine, prothioconazole, and tebuconazole in a three-component mixture that would provide advantageously enhanced efficacy as found by Applicants. Furthermore, Eicken et al and Valcke et al do not overcome the deficiencies of Jautelat et al and Latteur et al discussed above.

Because of the reliance of the Final Office Action on Valcke et al and its teaching of mixtures containing propiconazole, Applicants offer additional support for their arguments in a Declaration under 37 C.F.R. 1.132 of Dr. Peter Dahmen, which shows that a comparative three-component mixture containing spiroxamine, propiconazole, and tebuconazole (a mixture specifically taught by WO 96/41533, cited in Applicants’ Information Disclosure Statement) is decidedly inferior compared

to an inventive mixture of spiroxamine, prothioconazole, and tebuconazole. [The Declaration also shows similar inferior results for two comparative three-component mixtures in which the propiconazole is replaced with structurally similar triadimenol and triadimefon, respectively, as disclosed in WO 96/41533 (also cited in Applicants' Information Disclosure Statement).] Because the Declaration merely augments the data already found in their specification and the arguments presented above, Applicants respectfully submit that consideration of these new data is appropriate and not unduly burdensome despite being offered after final rejection.

In view of these remarks, Applicants respectfully submit that their invention is not rendered obvious by Jautelat et al in view of Latteur et al, Eicken et al, and Valcke et al.

In view of the preceding amendments and remarks, allowance of the claims is respectfully requested.

Respectfully submitted,

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